



06-29-07

1FW 1657 ✓

PTO/SB/21 (09-06)  
Approved for use through 03/31/2007. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |                      |                        |              |
|---|----------------------|------------------------|--------------|
| <b>TRANSMITTAL FORM</b><br><br>(to be used for all correspondence after initial filing) | Application Number   | 10/038,891-Conf. #8813 |              |
|   | Filing Date          | January 2, 2002        |              |
|   | First Named Inventor | Jeffrey T. Borenstein  |              |
|   | Art Unit             | 1657                   |              |
|   | Examiner Name        | D. M. Naff             |              |
| Total Number of Pages in This Submission  | 18                   | Attorney Docket Number | 62030(51588) |

| ENCLOSURES (Check all that apply)   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Fee Transmittal Form                  | <input type="checkbox"/> Drawing(s)   | <input type="checkbox"/> After Allowance Communication to TC                            |
| <input type="checkbox"/> Fee Attached                                     | <input type="checkbox"/> Licensing-related Papers                                       | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences     |
| <input type="checkbox"/> Amendment/Reply                                  | <input type="checkbox"/> Petition   | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final                                      | <input type="checkbox"/> Petition to Convert to a Provisional Application               | <input type="checkbox"/> Proprietary Information  |
| <input type="checkbox"/> Affidavits/declaration(s)                        | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input type="checkbox"/> Status Letter  |
| <input type="checkbox"/> Extension of Time Request                        | <input type="checkbox"/> Terminal Disclaimer  | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):         |
| <input type="checkbox"/> Express Abandonment Request                      | <input type="checkbox"/> Request for Refund   | 1 Reference   |
| <input checked="" type="checkbox"/> Information Disclosure Statement      | <input type="checkbox"/> CD, Number of CD(s) _____                                      | Certificate of Express Mailing  |
| <input type="checkbox"/> Certified Copy of Priority Document(s)           | <input type="checkbox"/> Landscape Table on CD  | Return Postcard   |
| <input type="checkbox"/> Reply to Missing Parts/Incomplete Application    | Remarks   |   |
| <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 |   |   |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT |                                   |          |        |
|--|-----------------------------------|----------|--------|
| Firm Name                                  | EDWARDS ANGELL PALMER & DODGE LLP |          |        |
| Signature                                  | <i>George N. Chaclas</i>          |          |        |
| Printed name                               | George N. Chaclas                 |          |        |
| Date                                       | June 28, 2007                     | Reg. No. | 46,608 |



PTO/SB/17 (02-07)  
Approved for use through 02/28/2007. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number.

|   |  |                          |                                  |
|---|--|--------------------------|----------------------------------|
| <b>Effective on 12/08/2004.</b><br><b>Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).</b><br><b>FEE TRANSMITTAL</b><br><b>For FY 2007</b> |  | <b>Complete if Known</b> |                                  |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27   |  | Application Number       | 10/038,891-Conf. #8813           |
|   |  | Filing Date              | January 2, 2002                  |
|   |  | First Named Inventor     | Jeffrey T. Borenstein            |
|   |  | Examiner Name            | D. M. Naff                       |
| TOTAL AMOUNT OF PAYMENT (\$)  |  | 180.00                   | Attorney Docket No. 62030(51588) |

**METHOD OF PAYMENT** (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account Deposit Account Number: 04-1105 Deposit Account Name: Edwards Angell Palmer & Dodge LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

**FEE CALCULATION**

**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

| Application Type | Fee (\$) | FILING FEES           |                       | SEARCH FEES           |                       | EXAMINATION FEES |  | Fees Paid (\$) |
|------------------|----------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|--|----------------|
|                  |          | Small Entity Fee (\$) | Small Entity Fee (\$) | Small Entity Fee (\$) | Small Entity Fee (\$) |                  |  |                |
| Utility          | 300      | 150                   | 500                   | 250                   | 200                   | 100              |  |                |
| Design           | 200      | 100                   | 100                   | 50                    | 130                   | 65               |  |                |
| Plant            | 200      | 100                   | 300                   | 150                   | 160                   | 80               |  |                |
| Reissue          | 300      | 150                   | 500                   | 250                   | 600                   | 300              |  |                |
| Provisional      | 200      | 100                   | 0                     | 0                     | 0                     | 0                |  |                |

**2. EXCESS CLAIM FEES**

| Fee Description                                    | Fee (\$) | Small Entity Fee (\$) |
|--|----------|-----------------------|
| Each claim over 20 (including Reissues)            | 50       | 25                    |
| Each independent claim over 3 (including Reissues) | 200      | 100                   |
| Multiple dependent claims                          | 360      | 180                   |

**Total Claims** 22 - 37 =        x        =        **Fee Paid (\$)**       

HP = highest number of total claims paid for, if greater than 20.

**Indep. Claims** 4 - 7 =        x        =        **Fee Paid (\$)**       

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| Total Sheets   | Extra Sheets | Number of each additional 50 or fraction thereof | Fee (\$) | Fee Paid (\$) |
|--|--------------|--|----------|---------------|
| <u>      </u> - 100 = <u>      </u> /50 <u>      </u> (round up to a whole number) x <u>      </u> = <u>      </u> |              |  |          |               |

**4. OTHER FEE(S)**

|   | Fees Paid (\$) |
|---|----------------|
| Non-English Specification, \$130 fee (no small entity discount)                             |                |
| Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement | 180.00         |

|                     |                       |                                   |                |
|---------------------|-----------------------|-----------------------------------|----------------|
| <b>SUBMITTED BY</b> |                       |                                   |                |
| Signature           | <u>George Chaclas</u> | Registration No. (Attorney/Agent) | 46,608         |
| Name (Print/Type)   | George N. Chaclas     | Telephone                         | (401) 276-6653 |
|                     |                       | Date                              | June 28, 2007  |



Application No. (if known): 10/038,891

Attorney Docket No.: 62030(51588)

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EM005402346US in an envelope addressed to:

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on June 28, 2007  
Date

*Lisa A. Rollins*  
Signature

Lisa A. Rollins

Typed or printed name of person signing Certificate

Registration Number, if applicable

(401) 276-6633  
Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Transmittal (1 page)  
Fee Transmittal Form  
Supplemental IDS w/1449 (1 Reference) (3 pages)  
Return Postcard

Charge \$180.00 to deposit account 04-1105



Docket No.: 62030(51588)  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Jeffrey T. Borenstein et al.

Application No.: 10/038,891

Confirmation No.: 8813

Filed: January 2, 2002

Art Unit: 1657

For: ENGINEERING OF THREE-  
DIMENSIONAL VASCULARIZED TISSUE  
USING MICROFABRICATED POLYMER  
ASSEMBLY TECHNOLOGY

Examiner: D. M. Naff

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (SIDS)**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

06/29/2007 WASFAW1 00000030 041105 10038891  
01 FC:1806 180.00 DA

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed after the mailing date of a Final Office Action or Notice of Allowance, whichever occurred first, but on or before payment of the Issue Fee (37 CFR 1.97(d)). Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered.

I hereby certify, pursuant to 37 CFR 1.97(e)(2), that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, no item of information contained in this Information

Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Please charge our Deposit Account No. 04-1105 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105, under Order No. 62030(51588). A duplicate copy of this paper is enclosed.

Dated: June 28, 2007

Respectfully submitted,

By George N. Chaclas  
George N. Chaclas

Registration No.: 46,608

Peter C. Lauro

Registration No.: 32,360

EDWARDS ANGELL PALMER & DODGE LLP

P.O. Box 55874

Boston, Massachusetts 02205

(401) 276-6653

Attorneys/Agents For Applicant



PTO/SB/08A/B (09-06)  
Approved for use through 03/31/2007. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|   |   |    |   |                          |                        |
|---|---|----|---|--------------------------|------------------------|
| Substitute for form 1449/PTO  |   |    |   | <b>Complete if Known</b> |                        |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(Use as many sheets as necessary) |   |    |   | Application Number       | 10/038,891-Conf. #8813 |
|   |   |    |   | Filing Date              | January 2, 2002        |
|   |   |    |   | First Named Inventor     | Jeffrey T. Borenstein  |
|   |   |    |   | Art Unit                 | 1657                   |
|   |   |    |   | Examiner Name            | D. M. Naff             |
| Sheet   | 1 | of | 1 | Attorney Docket Number   | 62030(51588)           |

| U.S. PATENT DOCUMENTS |                          |  |                                |  |   |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       |                          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       |                          |  |                                |  |   |

| FOREIGN PATENT DOCUMENTS |                          |   |                                   |  |   |                |
|--------------------------|--------------------------|---|-----------------------------------|--|---|----------------|
| Examiner<br>Initials*    | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication<br>Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>6</sup> |
|                          |                          | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                   |  |   |                |
|                          |                          |   |                                   |  |   |                |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS |                          |   |                |
|---------------------------------|--------------------------|---|----------------|
| Examiner<br>Initials*           | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                                 |                          |   |                |
|                                 | CA                       | Kaihara, et al: "Silicon micromachining to tissue engineer branched vascular channels for liver fabrication", Tissue Engineering, Apr. 2002, vol. 6, no. 2, April 2000 (2000-04), pp. 105-117   |                |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

892192